

551,014

## (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
21 October 2004 (21.10.2004)

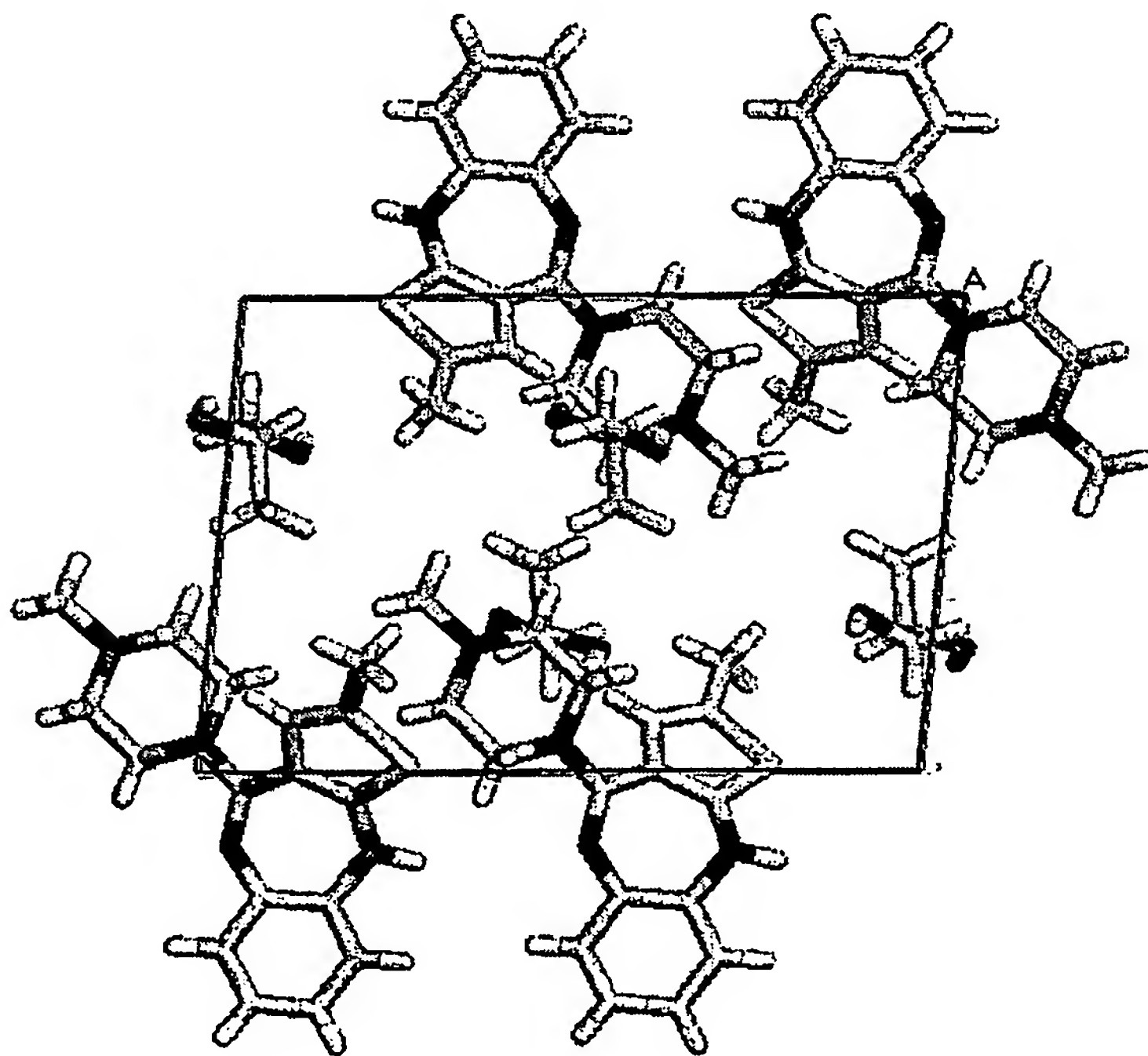
PCT

(10) International Publication Number  
**WO 2004/089313 A2**

- (51) International Patent Classification<sup>7</sup>: **A61K**
- (21) International Application Number: PCT/US2004/009947
- (22) International Filing Date: 31 March 2004 (31.03.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
- |                |                                |    |
|----------------|--------------------------------|----|
| 60/459,501     | 1 April 2003 (01.04.2003)      | US |
| 60/487,064     | 11 July 2003 (11.07.2003)      | US |
| 60/486,713     | 11 July 2003 (11.07.2003)      | US |
| PCT/US03/27772 |                                |    |
|                | 4 September 2003 (04.09.2003)  | US |
| 10/660,202     | 11 September 2003 (11.09.2003) | US |
| PCT/US03/41642 |                                |    |
|                | 29 December 2003 (29.12.2003)  | US |
| 10/747,742     | 29 December 2003 (29.12.2003)  | US |
| PCT/US04/06288 |                                |    |
|                | 26 February 2004 (26.02.2004)  | US |
| 60/548,343     | 27 February 2004 (27.02.2004)  | US |
- (71) Applicant (for all designated States except US): TRANSFORM PHARMACEUTICALS, INC. [US/US]; 29 Hartwell Avenue, Lexington, MA 02421 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): HICKEY, Magali, Bourghol [US/US]; 342 Malden Street, Medford, MA 02155 (US). REMENAR, Julius [US/US]; 9 Eaton Road, Framingham, MA 01701 (US).
- (74) Agent: OLSON, Christopher; Transform Pharmaceuticals, Inc., 29 Hartwell Avenue, Lexington, MA 02421 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,

[Continued on next page]

(54) Title: NOVEL OLANZAPINE FORMS AND RELATED METHODS OF TREATMENT



(57) Abstract: The invention provides novel soluble olanzapine forms. These forms include salts, co-crystals, and solvates of olanzapine. The invention also provides novel pharmaceutical compositions comprising these novel soluble forms and related methods of treatment. Compositions and methods of the invention are useful in the treatment of psychosis and functional bowel disorders.

Z →

WO 2004/089313 A2



TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(84) **Designated States** (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK,

**Published:**

— *without international search report and to be republished upon receipt of that report*

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*